



*Office of Laboratory Licensure,
Certification & Training*

3443 N Central Avenue, Suite 810
Phoenix, Arizona 85012
(602) 255-3454
(602) 255-1070 FAX
Technical Support Hot-Line 1-800-592-0374

Jane Dee Hull, Governor
James R. Allen, MD, MPH, Director

DATE: April 2, 1998

TO: Laboratory Director and QA Manager

FROM: Dr. Barbara J. Erickson, Ph.D., Bureau Chief

SUBJECT: Information Update #45

IMPORTANT: This update contains information regarding the transition of 418.1AZ to 8015AZ. This is different from the ones published in the earlier Updates due to the new resolution made amongst ADEQ staff. This clarification should be the final interpretation from ADEQ regarding the transition of 8015AZ.

NOTE: If any problems occur with this web site, please call 1-800-952-0074 or (602) 255-3454 and ask for Technical Resources and Training. Thank You.

1. Please see attached the statistical data of 8015AZ blind PE study conducted in conjunction with ERA in January and February of 1998. 18 results were acceptable for gasoline (purge and trap) and 18 were acceptable for C₆-C₃₂. Letters of certification status have been faxed to those labs who participated in this study. A successful completion of all the criteria specified in Information Update #41 dated January 23, 1998 is a requirement for certification.

Arizona Laboratory Licensure is working with ERA to set up custom blind samples for both gasoline purge and trap and C₆-C₃₂. These blind samples will be ready in about 3 weeks. They can be ordered from ERA anytime and there is no deadline to comply with. Please call Michael Blades of ERA @ 1-800-372-0122 to order these blind samples. An initial acceptable completion of blind sample(s) is(are) required for certification of 8015AZ in addition to the completion of the criteria specified in Information Update #41 dated January 23, 1998.

2. The next quarterly ELAC (Environmental Laboratory Advisory Committee) meeting date has been changed to April 30, 1998 from April 23, 1998 (See information Update #44, item #5 for details).
3. Arizona Laboratory Licensure has received a written clarification from the Arizona Department of Environmental Quality (ADEQ) for the applicability of 418.1AZ and 8015AZ methods for compliance testing in Arizona. Please see the following memo dated April 1, 1998, received from Michele Robertson of ADEQ.

"On January 12, 1998, method 8015AZ became an ADHS-approved analytical method. A transition

period through the end of March allowed an opportunity for environmental laboratories to obtain certification for this new method. Method 418.1AZ was used during the transition period for purposes of determining compliance with the soil remediation standards. Now that method 8015AZ is widely available, ADEQ is clarifying the appropriate use of the two analytical methods because they are not interchangeable and the results are not comparable.

Effective April 1, 1998, method 8015AZ is the laboratory analytical method required by ADEQ to determine compliance with the Soil Remediation Standards Rule (A.A.C. R18-7-201 et seq.). The Soil Remediation Standards Rule became effective on December 4, 1997 and lists "hydrocarbons C10 - C32" soil remediation levels (SRLs) in Appendix A to the rule. Method 8015AZ is necessary to quantitate the listed range of hydrocarbons. (Note: There is no SRL representing the range of hydrocarbons between C6 - C9. Individual SRLs for BTEX or PAHs also apply if those contaminants are present).

Prior to December 4, 1997, the Interim Soil Remediation Standards Rule (Interim Rule) was in effect and some soil remediation activities may be continuing under the Interim Rule. The Health-Based Guidance Levels (HBGLs) apply to those soil remediations under the Interim Rule. To ensure consistency between site characterization and remediation activities conducted under the Interim Rule, laboratory analytical method 418.1AZ should be used to verify compliance with the Total Petroleum Hydrocarbon (TPH) HBGLs. Please refer any questions to Michele Robertson (207-4415) or Don Richey (207-4129)."

4. Recently the Office of Laboratory Licensure received an inquiry regarding our policy on the use and certification frequency of eppendorf pipets. We checked with different offices within the EPA for guidance on this issue. We received various answers regarding the acceptability of using eppendorf pipets and their calibration. We were unable to find definitive criteria in any of the EPA documents we reviewed with the exception of SW-846, 7000A. Therefore the Office of Laboratory Licensure has established the following criteria:
 - a. When eppendorf pipets are used for the preparation of either the primary or secondary standards and class A pipets are used for the preparation of the other set of standards then the following calibration criteria must be used:
 - i. The eppendorf pipets must be calibrated at least quarterly.
 - ii. The eppendorfs pipets must be calibrated to within $\pm 2\%$ of the set value.
 - iii. Eppendorfs used over a range of settings must be calibrated at the highest and lowest settings used.
 - b. When eppendorf pipets are used for the preparation of both the primary and secondary standards the following calibration criteria must be used:
 - i. The eppendorf pipets must be calibrated on the day the standards are prepared.
 - ii. The eppendorfs pipets must be calibrated to within $\pm 2\%$ of the set value.
 - iii. Eppendorfs used over a range of settings must be calibrated at the highest and lowest

settings used.

- c. When using SW-846 Atomic Absorption methods the following criteria must be followed:
- i. "The accuracy of automatic pipets must be verified daily." {see 7000A (rev.1), section 4.6}
 - ii. The eppendorfs pipets must be calibrated to within $\pm 2\%$ of the set value.
 - iii. Eppendorfs used over a range of settings must be calibrated at the highest and lowest settings used.

For results of the 8015AZ BLIND PE STUDY from March 1998, please contact the Office of Laboratory Licensure.

5. If you have any questions regarding the Updates, or if you have any technical questions that need clarification, please call or send [e-mail](#) to Prabha Acharya, Program Manager, Technical Resources and Training at the Laboratory Licensure. A [table of contents](#) to all the Information Updates published is also available.

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